

D&D Subgroup Highlights  
March 12, 1997

Laser Demo Update

The funding of the hot cell demonstration of the laser has been agreed to by BWHC and EM-50. BWHC will provide scope or staff support to the demonstration. There are still two days left of the cold demonstration. Stainless steel and zirconium still are left to be cut. In addition, work is being done on developing an aiming device for the end effectors and on cutting hanging objects. Hot cell work is scheduled to start at the end of April or beginning of May.

The laser is not available through the end of June. The price to purchase this laser was last quoted as \$180K, but is negotiable. If the price was \$60-\$65K then perhaps funding could be obtained from pollution prevention. Funding could also be applied for from the new Technology Deployment Initiative. There is a need to begin serious negotiations now. FDH will work with BWHC on these negotiations. An analysis of the staff time saved versus the cost of power for the laser needs to be done.

Also, before a decision is made, the effects of high radiation fields on the laser need to be determined. LANL may do the analysis of these radiation effects on the laser optics and other systems for fill. FDH will work with Keith Pauley on arranging the LANL testing. A suggestion was made that the results of the LANL tests could be shared with the owners of the laser as part of the negotiated price.

Technology Deployment Initiatives (TDI)

Dave Biancosino (DOE-RL) is leading the Hanford effort to develop and submit proposals to EM-50 as part of the TDI. This is an EM-50 headquarters effort that has \$50 million in FY98 and FY99. The money is for deployment, not for demos. Proposals need to be sent in two months. INEL EM-50 personnel are running TDI. Proposals are for \$5 million or less and will be signed off by John Wagoner. Funding will be available for up to two years for each proposal accepted for funding.

The intent of TDI is to reduce the mortgages at each Site and accelerate the 10-Year Plan. The funding is not to supplement operational funding or to do what is already being done quicker. Rather, it's to deploy new, to the Site, technologies. There will be a national Source Evaluation Board (SEB) that will include DOE-RL representatives to evaluate the proposals. In addition, three review teams will be established to support the SEB and these will also have DOE-RL representatives. Dave handed out two pages: one showing the Hanford project proposal flow chart for TDI and the other was the preproposal outline. The STCG is heavily involved in the process at Hanford. After selection by the TDI national team, there is a qualification phase. The preproposals are to be only three pages long and include estimated costs and benefits of the proposed deployment. Dave handed out the TDI preproposal outline.

In the selection process, multiple site interest will be looked upon favorably and if collaboration is done it would lead to a stronger proposal. At the present time, the DOE is trying to see if the money saved by installing TDI technologies could be split between the TDI fund and the Site that installs the new technology. The legality of this approach is being studied. The preproposals that

the D&D Subgroup are to review will be e-mailed to all members for comments and concerns. If anyone has any questions about this process, contact Dave Biancosino at 372-4012. Dave will be attending the bidders conference or workshop on March 27 in Gaithersburg, Maryland.

### Technology Needs Update

An initial response has been received from D&D Focus Area to the needs we sent them. This response will be sent to all Subgroup members for review. The response is a table that, for each need, defines the categories the need is associated with, commercial innovative technologies which may satisfy the need, and developing technologies which also may satisfy the need. The Hanford STCG will send a response back to the Focus Area concerning this table. Shannon Saget would like the Subgroup members' response to this table by COB March 26, 1997 as she will be attending the D&D Focus Area mid-year STCG meeting after that. Shannon will provide feedback on the Focus Area response at both meetings. A copy of the D&D Focus Area annual report for 1996 will be sent to all Subgroup members.

### C-Reactor Demonstration Update

Stephen Pulsford stated that by the end of March six technologies will have had their demonstration started. In addition, four of these technologies will have their fact sheets completed by then. After a fact sheet is completed, the final report for the green book takes six to eight weeks to produce. The demonstrations to be underway or completed by the end of March are: the Laser-Assisted Ranging and Data Systems, STREAM, Hydraulic Shears, Temporary Power and Light System, Gamma Ray Imaging, and Pipe Cutting System. A tour of the C-Reactor demos in May will be planned for the subgroup. As part of this tour, a presentation will be given on the pros and cons of the IC team approach. At the D&D mid-year review meeting the first week in April the effectiveness of the IC team approach is going to be discussed. In addition, an ASME review of this approach is also underway.

### PHMC Technology Management Approach

Wayne Green discussed the PHMC approach to technology management in a viewgraph presentation. The FDH technology management strategy includes the STCG management council and DOE-RL at the policy level, the STCG Subgroups along with the FDH technology management group and others are at the PHMC execution level, and finally there is the project level where technology needs arise and deployment takes place. At this project level, a technology steering groups (TSGs) have been formed at each subcontractor. These TSGs will work with the STCG subgroups to demonstrate/deploy innovative technologies on-site. After an internal TSG review process, deployment teams will be formed with the appropriate project personnel to demonstrate/deploy a particular technology. Deployment teams are just being formed now to begin this new process. The subgroup members stated that they would like to be kept abreast of all activities of the TSG in the D&D area and of the related deployment teams. One comment was that there was a lack of communication of this new process to DOE-RL, as well as the rest of the STCG.

### Meeting Attendees

Dave Biancosino (DOE-RL)  
Robbin Duncan (BWHC)  
Sue Garrett (PNNL)  
Rick Gonzalez (DOE-RL)  
Wayne Green (FDH)  
Bob Julian (Ecology)  
Gerry McCormick (BWHC)  
Keith Pauley (PNNL)  
Stephen Pulsford (BHI)  
Shannon Saget (DOE-RL)  
Jackie Vander Veen (FDH)  
Steve Weakley (PNNL)